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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/549,855

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EXAMINER

PAYER, PAUL F

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/549,855	Applicant(s) YAMANAKA, TOSHIHIRO	
	Examiner PAUL F. PAYER	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's submission filed on December 27, 2010 has been entered. Applicant amends claims 6, 7 and 18. Claims 6-18 are now pending in the application.

Response to Arguments

2. Applicant's arguments with respect to the **35 USC § 103(a)** rejection for claim 6 have been considered and are persuasive. Therefore, the rejection is withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Kawabuchi et al., Shimizu and Bunker necessitated by amendment.

Official Notices

3. It is noted that official notices were taken by the Examiner in rejecting claims 14-17 in the office action dated October 26, 2010. These official notices, not having been challenged in Applicant's amendment filed on December 27, 2010, are assumed to be accepted by Applicant.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 6-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawabuchi et al. (U.S. 5,884,122), Shimizu (U.S. 2004/0012812) and Bunker (U.S. 7,072,054).

Regarding claims 6, 7 and 18 (currently amended), Kawabuchi et al. discloses an information processing apparatus (column 1/lines 5-6), comprising:

a power switch for activating the information processing apparatus (column 2/lines 26-29, the printer has a power switching device used to shut down and power up the printer), comprising;

a receiving unit that receives an instruction for turning off the power switch (Figs. 3, and 9, column 7/lines 60-65 and column 8/lines 35-37; controller 300, which corresponds to the receiving unit, receives and processes commands entered by the user through the operation panel 40; one of the commands handled is the auto-shut-off command identified at step S71 of Fig. 9);

a storage unit that stores data to be processed (Fig. 3 and column 5/lines 3-11; image memory 401 stores print data/data to be processed);

a management record unit that records processing contents data (Fig. 3 and column 5/lines 26-29, the RAM 402 stores print job data/processing contents data);

a control unit that controls to carry out information processing, based on the processing contents data recorded in the management record unit, about the data to be processed stored in the storage unit (Fig. 3, the controller 300 controls the printing function; it prints the print data/processing contents data stored in image memory 401 based on the print job data/processing contents data stored in RAM 402);

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a resuming unit that resumes, when the information processing is temporarily stopped and resumed, the information processing based on the processing contents data which is not changed between pre- and post- resuming (column 2/lines 30-34, if the power supply is turned off with the auto-power-off function and *turned on automatically*, the device restores the operation state to that before the power off and resumes regular operation; this implies restoring the print job data/processing contents data to RAM and executing the respective print jobs);

an invalidating unit that invalidates the processing contents data recorded in the management record unit (column 2/lines 34-38; if the power supply, having been turned off with the auto power-off function, and *turned on manually*, the print job data/processing contents data is erased; this corresponds to invalidating the print job data/processing contents data recorded in the management record unit; controller 300 erases the print job data/processing contents data and corresponds to the claimed invalidating unit);

a limiting unit that limits, when the power switch is turned off and the invalidating unit is operable, the operation of the resuming unit, wherein the information processing is resumed after deleting a part or all of the processing contents data recorded in the management record unit (column 2/lines 34-38; if the power supply, having been turned off with the auto power-off function, is *turned on manually*, the print job data/processing contents data is erased; printing cannot resume, which corresponds to limiting the operation of the resuming unit), wherein

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the limitation performed by the limiting unit is prevented when the power switch is turned off and the invalidating unit is not operable (column 2/lines 31-34; if the power supply was turned off with the auto power-off function and *turned on automatically*, the print job data is not erased; this corresponds to preventing the limiting unit, i.e., restoring the device state before the power switch was turned off and resuming the regular printing operation) and

if the storage unit successively stores the data to be processed, the control unit controls to carry out successive information processing about data to be processed having already stored in the storage unit (Fig. 3, corresponding to the common mode of operation of a copier, data is scanned by image reader 100, stored in image memory 401 and then printed by printer 200 under the control of controller 300; data is “successively” stored in image memory 401 and print data stored in image memory 401 is “successively” printed).

Kawabuchi et al. does not disclose the system processing print jobs based on a specific setting.

However, Shimizu discloses a system which addresses the tradeoff between convenience and security for print jobs by assigning a security level to each print job and processing the print job based on the assigned security level (abstract and [0009]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have implemented Shimizu's method of processing print job based on their security level in Kawabuchi et al.'s system because Shimizu's method

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better addresses the known tradeoff between convenience and security (Shimizu, abstract/lines 1-3 and Kawabuchi et al. column 1/line 65-column 2/line 3).

The combined Kawabuchi et al. and Shimizu printing system teaches:

an operation admission unit that utilizes a setting which determines whether or not the processing contents should be invalidated to make the invalidating unit operable so that after the information processing is carried out, the invalidating unit invalidates the processing contents data representing processing contents data for which the information processing has been carried out (Shimizu, Fig. 2 and [0092], after a print job is printed at step S203, the security mode of the print job (corresponding to the claimed setting) is checked at step S204 and a data erasure process/invalidating is executed on secure print jobs at step S206);

a decision unit that decides in response to the reception of the instruction by the receiving unit whether the invalidating unit is allowed to invalidate or not, on the basis of the setting of the operation admission unit (Kawabuchi et al., Fig. 9/item S71-S72, Fig. 10/items S103-S105 and column 7/lines 60-65 and column 8/lines 35-37 and Shimizu, Fig. 2 and [0092]; in the context of the combined Kawabuchi et al. and Shimizu system, upon receipt of an auto-shut-off command at step S71 of Fig. 9, only non-secure print job data is backed up in non-volatile memory at step S104 of Fig. 10; Shimizu Fig. 2's steps S204 and S206 show how the mode is determined and executing an erasure based on the mode; in the combined system, security is ensured by not backing up the secure data rather than deleting/erasing secure data which is already backed up);

when the receiving unit receives the instruction, the invalidation unit performs the invalidation or not on the basis of the decision result by the decision unit and the power switch is turned off (Kawabuchi et al., Fig. 9; the auto-shut-off instruction is received at step S71 and the power switch is turned off at step S74).

In the combined Kawabuchi et al., Shimizu system, non-secure print jobs would be backed up and automatically restored for user convenience (the user would not need to re-enter the print job information) while unauthorized users would be prevented from viewing secure print jobs thereby avoiding a security issue (secure print jobs would not be backed up and could not be restored and viewed.)

When the information processing apparatus is set to operate in the first mode (the secure mode), the decision unit decides that the invalidating unit is allowed to invalidate in response to the reception of the instruction by the receiving unit (Shimizu, Fig. 2, when, at step S204 it is determined that a print job is a secure print job, the YES branch is followed and the print job is erased at step S206); and

when the information processing apparatus is set to operate in the second mode (the non-secure mode), the decision unit decides that the invalidating unit is not allowed to invalidate in response to the reception of the instruction by the receiving unit (Shimizu, Fig. 2, when, at step S204 it is determined that a print job is a non-secure print job, the print job is erased at step S206, the NO branch is followed and the print job is not erased).

Kawabuchi et al. and Shimizu teach all the limitations of claims 6, 7 and 18 except for the first and second modes of operation not being attached to print job data/processing contents data settings.

However, Bunker discloses an apparatus similar to that of Kawabuchi et al. and Shimizu featuring a configurable secure erasure function (Fig. 3A and column 3/lines 47-58). An administrator could, using this interface, configure a device to execute the secure erase procedure after a power loss (check After Power Loss checkbox of Fig. 3A) or not to execute the procedure (uncheck the After Power Loss checkbox).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to have applied the techniques taught by Bunker to Kawabuchi et al. and Shimizu's device by allowing for the security operation of the device to be flexibly configured by an operator to better address the security requirements of high security areas versus lower security areas (Bunker refers to the different security requirements of high security and low security environments on column 1/lines 24-29).

One obvious option would be to apply Shimizu's secure mode of operation to the high security environment and the non-secure mode of operation to the low security environment.

Regarding claim 8 (dependent on claim 6, Previously Presented) **and claim 9** (dependent on claim 7, Previously Presented), Kawabuchi et al., Shimizu and Bunker disclose the information processing apparatus backing up the print job data from RAM to non-volatile memory during the power down and restoring the print job data into RAM

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on power up (Kawabuchi et al., column 2/lines 30-34, if the power supply was turned off with the auto-power-off function and turned on automatically, the device restores the operation state to that before the power off (in restores in particular the print data and print job data) and resumes regular operation). While not explicitly disclosed, maintaining a location of where in backup memory the print job data is stored is required for the print job data to be able to be restored.

Regarding claims 10-13 (all Currently Amended), Kawabuchi et al., Shimizu and Bunker disclose:

the processing contents data comprises data to be processed and associated information associated with the data (Kawabuchi et al., column 5/lines 3-10; print/image data is stored in image memory 401 and print job data (which include, among other data elements, number of copies, paper size, etc.) associated with the image/print data is stored in RAM 402, and

the limiting unit is structured so as to resume the information processing after all of the processing contents data is deleted from the management record unit (Kawabuchi et al., column 2/lines 34-38; if the power supply is turned on manually, the print job data is erased; this corresponds to invalidating the processing contents data recorded in the management record unit).

Regarding claims 14-17 (all Previously Presented), Kawabuchi et al., Shimizu and Bunker fail to explicitly disclose the management record unit storing the data to be processed in a condition of being encrypted.

The Examiner takes official notice that it is well known in the art to encrypt print data, specifically confidential data, in order to prevent leakage of such data. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to store print data in Kawabuchi et al. and Shimizu's system in an encrypted form in order to prevent leakage of such data.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAUL F. PAYER whose telephone number is (571) 270-7302. The examiner can normally be reached on Mon-Thu 6:15am-3:45pm, 2nd Fri of biweek 6:15am-2:45pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benny Q. Tieu can be reached on (571) 272-7490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Benny Q Tieu/
Supervisory Patent Examiner, Art Unit 2625

/Paul F. Payer/
Examiner, Art Unit 2625